#### REMARKS

This Paper responds to the Office Action dated April 2, 2009. A petition to extend the time in which to respond to the Office Action for three months, up to and including October 2, 2009, along with the requisite fee is enclosed herewith.

# Response to the Examiner's Claim Objections

In response to the Examiner's objections, the applicant has amended claims 15, 18, and 22 to correct the informalities identified by the Examiner. The Applicant gratefully acknowledges the Examiner's identification of each of the informalities and Section 112 issues.

## Response to the Claim Rejections under Section 112

Claims 15-18, 23, and 25-26 have been rejected under 35 U.S.C. § 112. In response to the rejection, the applicant has amended the claims to consistently refer to a "first planar sheet" and a "second planar sheet" which address the various Section 112 issues the examiner has identified. Claim 23 has been amended to correct the absence of the proper antecedent basis for "said support structure." It is submitted that the amendments traverse the rejections.

#### Summary of the Response to the Claim Rejections under Sections 102 and 103

Claims 1-26 are pending. All of the pending claims stand rejected over U.S. Patent No. 5,136,822 to Blum ("Blum") and Blum in combinations with other references.

#### Summary of differences between the claimed invention and Blum

As best seen in Fig. 4 of the Blum reference, the panels disclosed by Blum lack a frame element provided around the periphery of the structure that has channels that face outwardly. Blum's panels are held onto a base member or strut member 47 (which include surface 45 that receives one side of the sheet surface.) in a manner that has some similarities to the applicant's

system. However, Blum system lacks a frame that surrounds the planar sheets members as disclosed and claimed by applicant.

As shown in Fig. 4, the top of the panel appears to includes a "w-shaped" top cap member. The manner in which this plate is attached to the panel is unclear in that screws 34 and plate 33 appear to attach three separate elements, the outer wall surface, an interior structure filled with insulating material 36 and the top cap. The lateral sides of Blum's panels are closed by rectangular sheet metal interior support columns. *See* reference no. 30 depicted at Fig. 2. *See also* patent abstract. These sides lack the claimed channel in a frame member.

Each panel also has an interior support column. See abstract.

Blum discloses using "overlapping fastening plates" to apparently connect the columns to the adjacent panels. Blum does not to appear to disclose a strut extending across a plurality of panels such as disclosed by the applicant in Fig 1. In addition, there does not appear to a horizontal elongate strut receive in the "W shaped channels of Blum. *See* Blum Fig. 1. Blum discloses a top channel plate 136 that rests on the top of the outside wall surface which is not disclosed in any further detail. See Blum column 4 lines 41-48. This plate does not appear to be received in the dual channels depicted on the top of the panels. It is submitted that Blum fails to disclose or suggest providing a panel having a frame member around the periphery which defines channels.

Figs 13 shows a bottom channel plate and Fig 14 a modified top channel plate. It is unclear how the top channel plate is engages the panels. In any event, these plates are not the same as the frames disclosed by the applicant. In summary, the claimed panels are significantly different than those disclosed by Blum. As a consequence, the features and characteristics of the panels are also different. For example, the applicants panels and building system does not

require fasteners such as elements 34 (see Fig. 2) elements 65 (see Fig. 4) or element 435 (see Fig. 9). (It is unclear how one would gain access to any of the fasteners disclosed by Blum with the exception of element 65.)

It is submitted that the peripheral frame as disclosed and claimed by the patent is absent from the Blum patent. In addition, as explained herein, the present invention is patentably distinct from Blum and the various combinations advanced by the Examiner that rely upon Blum. In a preferred embodiment, the claimed peripheral frame is comprised of a steel "U shaped" channel that receives a strut that may be attached to a base member. A strut is also provided in the top channel and a tie system sandwiches the panels between the top and bottom struts. The frame provides a number of advantages and features to the invention that further distinguish the invention from the prior art. For example, panels constructed in accordance with the claimed invention, having adhesive displaced within the core regions, can be used as structural elements, and as such, do not require additional support members like Blum's "rectangular sheet metal interior support columns."

#### Argument

The Examiner has rejected claims 14 and 16 as anticipated by Blum. The applicant has amended claim 14 to further require the method to involve the wall be constructed with panels having a frame members around the periphery as generally recited in claim 1. It is submitted that the claims now clearly distinguish from Blum because Blum does not disclose a panel with a frame structure surrounding the panels.

# Claim rejections under Section 103.

Claims 1-2, 5-10 and 15 are rejected under Section 103 in view of the Patent to Blum.

Reconsideration of the rejection is respectfully requested. As discussed above, Blum fails to

disclose a panel that has a frame member around its periphery. Blum also fails to disclose a panel having an inner core filled with adhesive, which holds together the planar member and the frame. The resulting structure and building system is radically different than Blum because the applicants building system does not require separate support members. It is submitted that one skilled in the art would not have been led to alter the panel structure of Blum to result in the claimed structure. And even if one were to select polyurethane as an insulating material, one would not necessarily use permanent lateral frame members to contain the insulation material. Using an additional frame would be cumulative to the existing columns of the Blum system and an expensive solution to adopt as a containment method for polyurethane. Rather, one skilled in the art may select another insulating material or maybe use a membrane or a temporarily barrier to hold the polyurethane insulation until the foam had cured. Most forms of insulation are self supporting and do not need lateral containment elements. It is submitted that that the use of a continuous peripheral frame around the panel is not an obvious adaptation of Blum and the Examiner's suggestion is a classic example of improperly using the applicant's disclosure as a blueprint to combine or alter the prior art to reach the claimed invention.

The Examiner's suggestion that it would have been obvious to use adhesive in Blum's panel "in order to make the panels stronger" is likewise not sound reasoning. Presumably the panels of Blum are construed with sufficient adhesive. Merely adding "more adhesive" would not necessarily make a panel "stronger." The strength of a panel includes its resistance to shear forces, stress forces and compression and other types of forces. Whether adding adhesive to Blum would depend on many variables – and it would also involve removing other elements such as the existing insulation profile. Moreover, if one wanted to make the Blum panels "stronger" one would have followed Blum's teachings and added additional "C shaped" support

members to support the front and rear surfaces (see element 256 and discussion thereof). In summary, the construction of the panel according to the claimed invention is vastly different than Blum and the features of the finished product are likewise different.

Regarding Claim 2, the applicant does not rely upon threaded ties rods for patentability but the claim is allowable in view of the limitations recited in the independent claim.

Regarding Claim 4, as discussed above, it is submitted that the requirement that the frame with a continuous channel is a further patentable improvement. This feature allows the panels to be used in different orientations. The prior art fails to disclose a frame having a continuous channels. The Examiner argument that position that it would have been obvious to provide such a channel to allow wiring is respectfully traversed. Wiring is conventionally installed after construction of a structure and the manner in which the panels are put together in the invention would make the channels inaccessible for such an application. It is noteworthy in this regard, that the applicant's solution for wiring involves an offset side that may receive a chase that opens to one lateral side of the panel. According to the Examiner's suggestion to provide channels, there would be no manner in which to access and route wiring though channels.

Regarding Claim 5, the applicant does not rely upon the shape of the channel or strut for patentability. The claim is nevertheless allowable in view of the limitations recited in the independent claim

Regarding Claim 6, the applicant does not rely upon the use of gypsum for patentability but the claim is allowable in view of the limitations recited in the independent claim.

Regarding Claim 7, the applicant does not rely on the use of cement board for patentability.

Regarding Claim 8, the applicant incorporates is argument above and its submitted that the combination recited is a patentable advancement in the art. In this regard, the use of polyurethane foam results in a structure wherein the frame is put into stress and adds strength to the structure. See argument above.

Regarding Claim 9, the applicant does not rely upon the relationship between the struts for patentability but the claim is allowable in view of the limitations recited in the independent claim.

Regarding Claim 10, the applicant does not rely upon the respective polygonal shape of the panels for patentability but the claim is allowable in view of the limitations recited in the independent claim.

Regarding Claim 15, the applicant relies upon the same rationale as set forth in claim 1 and does not rely upon the polygonal shape of the panels for patentability but the claim is allowable in view of the limitations recited in the independent claim.

#### The rejection of Claim 3

The Examiner has rejected claim 3 as obvious over Blum in view of Cornett Sr. et al, U.S No. 6,161,339. It is submitted that the use of a tension wire in order to server is a further patentable advancement which may result in cost savings and an easier manner to assemble the when compared to rigid tie rods. It is submitted that one would not have been motivated to substitute the wire ties of Cornett for tie rods without the benefit of the teachings of the inventors. The use of wire ties as disclosed is not a common in the construction of residential buildings nor are threaded rods and wire considered to be interchangeable.

# The rejection of Claims 11 and 12

Regarding Claim 11, in addition to the limitations recited in the independent claim, claim 11 further provides that panels can be to be used for applications other than conventional walls having horizontal tops. It is submitted that one skilled in the art would not consider the construction of other shapes in combination with the other claim limitations.

Regarding Claim 12, in connection with claim 12, see the argument with respect to claim 11.

## The rejection of Claim 17

Claim 17 has been rejected as obvious over Blum in view of Russell (3,330,084) ("Russell"). In connection with claim 17, the applicant does not rely upon the corner panel and its orientation for patentability but the claim is allowable in view of the limitations recited in the independent claim.

### The rejection of Claim 18

Claim 18 has been rejected in view of Blum and the argument that it would been obvious to substitute adhesive for insulation. In response, the applicant points out that Blum does not teach the claimed frame elements as the amended claims require. Elements 30, 36 and 38 do not have channels as claimed. Further, in view of the present amendment, the claimed invention further distinguishes. In addition, for the reasons set forth above, it would not have been obvious to substitute insulation with a bonding agent or adhesive.

#### The rejection of Claim 19

The rejection of claim 19 is not understood. Blum does not teach a channel in the center of the frame. Rather, the top of the panel ahs two channels, the bottom of the panel has a single channel and the "frame" on the sides of the panel lack a channel. In the event that the Applicant

has misunderstood the rejection, the applicant respectfully requests a teleconference to discuss the nature of the rejection to claim 18.

# The rejection of Claim 20

It is submitted that the claim, as amended, is not is not met by the Blum's top channel structure. In this regard, the top channel does not intersect with channels on lateral sidewalls.

# The rejection of Claims 13, 21 and 22

The applicant does not rely upon the strip limitation or hook and loop fasteners for patentability but claim 21 is allowable in view of the limitations recited in the respective independent claims.

## .The rejection of Claim 23

Claim 23 is directed to the feature illustrated in Figs. 36 and 38. While the use of a chase may be well know, the present case is provided in a structural panel while maintain its structural strength to support forces imposed on the top of the panel. The provision of a chase in the present claimed panel is a patentable improvement not suggested by Blum or any of the prior art of record.

#### The rejection of Claim 24.

The applicant does not rely upon the foam sleeve for patentability but claim 21 is allowable in view of the limitations recited in the respective independent claims

## The rejection of Claim 25

It is submitted that the rejection of claim 25 is ineffective because inter alia, Blum, as explained above, does not disclose the claimed channels as the Examiner suggests.

#### The rejection of Claim 26

The applicant does not rely upon the adhesive alone patentability but claim 21 is allowable in view of the limitations recited in the respective independent claim 25.

# **Conclusion**

Wherefore, it is submitted that each of the examiner's objections and rejections have been traversed and the case is now in condition for allowance.

Respectfully submitted,

Andrew C. Aitken Reg. No. 36,729 Aitken Law Offices P.O. Box 1810 Wheaton, MD 20915

(301) 537-3299

# Certificate of Mailing

I hereby certify that on this 2<sup>nd</sup> day of October 2009, copies of the foregoing RESPONSE TO OFFICE ACTION, and Petition for Extension of Time Under 37 C.F.R. 1.136(a) and Fee Transmittal was sent postage prepaid to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Andrew C. Aitken